

690 North Studebaker Road Long Beach, CA 90803 tel 562 493 7891 fax 562 493 7320

February 8, 2018

Karen L. Larsen
Director
State Water Resources Control Board
1001 | Street
Sacramento, CA 95814

RE: Once-Through Cooling Interim Mitigation Requirements for the Alamitos Generating Station

Dear Ms. Larsen,

This letter is in response to your December 11, 2017 correspondence requesting information for determining interim mitigation fees for Once-Through Cooling (OTC) impingement and entrainment impacts at the AES Alamitos Generating Station (AES-AL). As stated in your letter, you requested the following information:

- 1. Monthly and total intake volume for October 1, 2016, through September 30, 2017; and
- 2. Actual annual impingement data in total pounds from October 1, 2016 through September 30, 2017, or newly available impingement data since October 1, 2016.

Our responses to your data request are detailed below:

1. Monthly and total intake volume for October 1, 2016 through September 30, 2017

Intake volumes for AES-AL are listed in the table below:

| Month | Intake Volume¹ Units 1 &2 (MGD) | Intake Volume ² Units 3&4 (MGD) | Intake Volume ³ Units 5&6 (MGD) | Intake Volume Total AES-AL (MGD) |
|-------------|---------------------------------|---|--|---|
| October-16 | 1018.95 | 8845.03 | 1556.43 | 11420.41 |
| November-16 | 1069.54 | 6501 | 1339.02 | 8909.56 |
| December-17 | 1072.7 | 3074.22 | 571.75 | 4718.67 |
| January-17 | 2032.75 | 2458.17 | 2109.87 | 6600.79 |
| February-17 | 1457 | 4276.58 | 721.43 | 6455.01 |
| March-17 | 2273.48 | 4928.83 | 787.8 | 7990.11 |

¹ Discharges to EFF-001

² Discharges to EFF-002

³ Discharges to EFF-003

| Total | 25012.07 | 60459.05 | 33512.61 | 118983.73 |
|------------------|----------|----------|----------|-----------|
| September- 17 | 3212.72 | 6424.04 | 5457.39 | 15094.15 |
| August-17 | 2159.85 | 8759.1 | 8928.26 | 19847.21 |
| July-17 | 3300.2 | 5392.66 | 2807.13 | 11499.99 |
| June-17 | 3062.09 | 4564.34 | 6469.58 | 14096.01 |
| May-17 | 2227.14 | 4074.48 | 2189.09 | 8490.71 |
| April-17 | 2125.65 | 1160.6 | 574.86 | 3861.11 |

There were no days during the period October 2016 through September 2017 when intake volume data was not available. Intake pumps were operational during the entire period. At least one circulating OTC pump was required for either power generation or critical system maintenance at all times at AES-AL.

2. Actual annual impingement data in total pounds of fishes impinged

Impingement data collected from October 1, 2016 to September 30, 2017 was used to derive the estimated pounds of fish impinged per volume of water for Units 1&2, Units 3&4, and Units 5&6. The actual cooling water flow data for the period from October 1, 2016 to September 30, 2017 for each generating unit pair was multiplied by the impingement rate to derive the estimated impingement biomass in pounds.

Using the method described above, the resulting fish impingement biomass from October 1, 2016 to September 30, 2017 is:

Units 1 & 2 Intake (to discharge EFF-001) = 144.7 lbs

Units 3 & 4 Intake (to discharge EFF-002) = 256.77 lbs

Units 5 & 6 Intake (to discharge EFF-003) = 42.63 lbs

AES-AL Station Total Estimate = 444.1 lbs

If you have questions regarding this submittal, please contact Coury McKinlay, AES Southland Environmental Manager at (562) 493-7863 or coury.mckinlay@aes.com.

Sincerely

Weikko Wirta

AES West Complex Operations Manager